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GEOLOGICAL SOCIETY OF LONDON SOMERSET HOUSE.

V. Descriptions of New Species of Fungi

BY CHAS. H. PECK.

[*Read before this Society June 6th*, 1873.]

HYMENOMYCETES.

Agaricus (Amanita) russuloides, *Peck.*

Pileus at first ovate, then expanded or convex, rough with a few superficial warts or entirely smooth, viscid when moist, widely striate-tuberculate on the margin, pale yellow or straw color; lamellae close, free, narrowed toward the stem, white; stem firm, smooth, stuffed, annulate, equal or slightly tapering upward, bulbous; annulus thin, soon vanishing; volva fragile, subappressed; spores broadly elliptical, .0004′* long, .0003′ broad.

Plant 2′–3′ high, pileus 1.5′–2′ broad, stem 3″†–5″ thick.

Grassy ground in open woods. Greenbush, June. This species is remarkable for the thin striate-tuberculate margin of the pileus which causes it to resemble some species of Russula.

Agaricus (Lepiota) fuscosquameus, *Peck.*

Pileus hemispherical or convex, rough with numerous erect pointed blackish-brown scales; lamellae close, white, free; stem equal, thickened at the base, hollow or stuffed with a cottony pith, floccose, brown; spores .0003′ × .00014′.

Plant 2′–3′ high, pileus 1.5′–2′ broad, stem 3″ thick.

Ground in woods. Croghan. September.

Agaricus (Lepiota) oblitus, *Peck.*

Pileus convex or expanded, subumbonate, smooth or obscurely squamose from the breaking up of the veil, viscid, alutaceous inclining to tawny, the umbo generally darker; lamellae crowded, free, whitish or yellowish, some of

*One accent (′) = inch or inches. †Two accents (″) = line or lines.

them forked; stem equal or slightly tapering upward, floccose, viscid, smooth at the top, hollow or containing a cottony pith; annulus obsolete; spores .00016′ × .00012′.

Plant 2′–3′ high, pileus 2′–3′ broad, stem 3″ thick.

Ground in frondose woods. Lowville. September.

Agaricus (Armillaria) ponderosus, *Peck.*

Pileus thick, compact, convex or subcampanulate, smooth, white or yellowish, the naked margin strongly involute beneath the slightly viscid persistent veil; lamellae crowded, narrow, slightly emarginate, white inclining to cream color; stem stout, subequal, firm, solid, coated by the veil, colored like the pileus, white and furfuraceus above the annulus; flesh white; spores nearly globose, .00016′ in diameter.

Plant 4′–6′ high, pileus 4′–6′ broad, stem about 1′ thick.

Ground in woods. Copake. October.

The veil for a long time conceals the lamellae and finally becomes lacerated and adheres in shreds or fragments to the stem and margin of the pileus.

Agaricus (Tricholoma) rubicundus, *Peck.*

Pileus convex, then expanded or centrally depressed, viscid, slightly tomentose on the margin when young, smooth, or sometimes with a few scales either on the disk or on the margin, red; lamellae close, white, becoming spotted with red, some of them forked; stem firm, equal, solid, slightly pruinose, white, often stained with red; spores .00028′ × .00016′.

Plant 3′–5′ high, pileus 3′–5′ broad, stem 6″–8″ thick.

Ground in woods. New Scotland. October.

Agaricus (Tricholoma) flavescens, *Peck.*

Pileus firm, convex, often irregular, dry, smooth, sometimes cracking on the disk into minute scales, white or pale yellow, minutely tomentose on the margin when young; lamellae close, floccose on the edge, white or pale yellow; stem firm, solid, often unequal, central or eccentric, colored like the pileus; spores subglobose, .0002′ in diameter.

Plant caespitose, 2′–3′ high, pileus 2′–3′ broad, stem 4″–6″ thick.

Old pine stumps. Bethlehem and North Greenbush. October.

Agaricus (Tricholoma) decorosus, *Peck.*

Pileus firm, at first hemispherical, then convex or expanded, coated with numerous brownish subsquarrose tomentose scales, dull ochraceous or tawny; lamellae close, rounded and slightly emarginate at the inner extremity, the

edge subcrenulate; stem solid, equal or slightly tapering upward, white and smooth at the top, elsewhere tomentose, scaly and colored like the pileus; spores broadly elliptical, .0002′ × .00015′.

Plant subcaespitose, 2′–4′ high, pileus 1′–2′ broad, stem 2″–4″ thick.

Rotten logs in woods. Catskill Mountains and Rock City. September and October.

Agaricus (Tricholoma) multipunctus, *Peck.*

Pileus brittle, broadly convex, sometimes centrally depressed or subumbilicate, densely dotted with minute brown or blackish scales, yellowish-brown, the disk often darker; lamellae close, slightly emarginate, yellow, sometimes with a darker edge; stem subequal, squamulose-punctate, hollow, colored like the pileus; spores suborbicular, .00016′ in diameter.

Plant subcaespitose, 1′–2′ high, pileus 1′–2′ broad, stem 2″–4″ thick.

Rotten logs in woods. Sandlake and Adirondack Mountains. July and August.

This species is related to *Ag. rutilans.*

Agaricus (Tricholoma) lacunosus, *Peck.*

Pileus convex or expanded, dry, lacunose, densely furfuraceous, bright golden yellow; lamellae subdistant, white, the interspaces sometimes veiny; stem firm, solid, equal or slightly tapering downwards, scaly or furfuraceous, colored like the pileus.

Plant 1′–2′ high, pileus 1′ broad, stem 1″ thick.

Fallen branches and decaying wood. Savannah. August.

The colors are well retained in the dried specimens. The lacunae of the pileus give it a somewhat reticulated appearance.

Agaricus (Tricholoma) laterarius, *Peck.*

Pileus convex or expanded, sometimes slightly depressed in the center, pruinose, whitish, the disk often tinged with red or brown, the thin margin marked with slight subdistant short radiating ridges; lamellae narrow, crowded, white, prolonged in little decurrent lines on the stem; stem nearly equal, solid, white; spores globose, .00018′ in diameter.

Plant 3′–4′ high, pileus 2′–4′ broad, stem 3″–5″ thick.

Ground in woods. Worcester. July.

Agaricus (Tricholoma) Limonium, *Peck.*

Pileus thin, smooth, yellowish; lamellae crowded, narrow, not forming decurrent lines on the stem, lemon-yellow; stem tapering downwards, smooth, striate, rooting.

Plant 3′–4′ high, pileus 2′–3′ broad, stem 3″–4″ thick.

Ground in woods. Worcester and Croghan. July and September.

The lemon color of the lamellae and the root-like prolongation of the stem characterize this species.

Agaricus (Tricholoma) virescens, *Peck.*

Pileus convex or expanded, sometimes depressed centrally, moist, smooth, dingy-green, the margin sometimes wavy or lobed; lamellae close, gradually narrowed toward the outer extremity, rounded or slightly emarginate at the inner, white; stem subequal, stuffed or hollow, thick but brittle, whitish, sometimes tinged with green; spores broadly elliptical, .0002′ × .00015′.

Plant 3′–5′ high, pileus 3′–5′ broad, stem 6″–12″ thick.

Mossy ground in open woods. North Elba. July.

Agaricus (Tricholoma) fumidellus, *Peck.*

Pileus subumbonate, smooth, moist, dingy-white or clay colored, clouded with brown; lamellae close, subventricose, whitish; stem equal, smooth, solid, whitish; spores, .00018′ × .00015′.

Plant 2′–3′ high, pileus 1′–2′ broad, stem 2″–3″ thick.

Ground in woods. New Scotland. October.

The disk is generally darker than the margin. The pileus becomes paler in drying. The stem splits easily.

Agaricus (Tricholoma) fallax, *Peck.*

Pileus firm, convex or expanded, rarely depressed in the center, moist, smooth, dull saffron color; lamellae crowded, narrow, tapering toward the outer extremity, rounded at the inner, yellow; stem short, smooth, stuffed or hollow, usually tapering toward the base, colored like the pileus; spores minute, subelliptical, .00012′ long.

Plant gregarious, 1′–1.5′ high, pileus 6″–15″ broad, stem 1″ thick.

Ground under spruce and balsam trees. North Elba. July.

Agaricus (Tricholoma) thujinus, *Peck.*

Pileus convex or centrally depressed, smooth, hygrophanous, pale alutaceous, the margin generally irregular, wavy or lobed; lamellae crowded, thin, abruptly emarginate, alutaceous; stem slightly thickened at the top, smooth, hollow, concolorous, whitish-villous at the base.

Plant 2′ high, pileus 2′ broad, stem 2″–3″ thick.

Swampy ground under *Thuja occidentalis.* Memphis. August.

Agaricus (Tricholoma) Hebeloma, *Peck.*

Pileus broadly conical or subcampanulate, obtuse, thin, hygrophanous, striatulate brown and dark on the disk when moist, grayish when dry; lamellae broad, rounded behind and deeply emarginate, yellowish; stem equal, hollow, smooth, pallid; spores .00028′ × .00016′.

Plant 1′ high, pileus 6″ broad, stem scarcely 1″ thick.

Ground in woods. Worcester. July.

This plant closely resembles some species of the subgenus Hebeloma, but the color of its spores forbid its reference to that subgenus.

Agaricus (Clitocybe) connexus, *Peck.*

Pileus thin, subumbonate, clothed with a minute appressed silkiness, white, the margin sometimes faintly tinged with blue; lamellae crowded, narrow, white inclining to yellowish; stem equal or tapering downwards, solid, whitish.

Plant 2′–3′ high, pileus 2′–3′ broad, stem 2″ thick.

Ground in woods. Croghan. September.

The lamellae are not strongly decurrent and sometimes terminate abruptly, hence it might easily be mistaken for a Tricholoma. The margin of the pileus is sometimes marked with slight ridges as in *Ag. laterarius*. The odor is weak but aromatic and agreeable.

Agaricus (Clitocybe) albissimus, *Peck.*

Pileus convex or expanded, dry, smooth, soft, pure white; lamellae crowded, short-decurrent, white, some of them forked at the base; stem equal, smooth, solid, white.

Plant growing in rings, 2′–3′ high, pileus 2′–3′ broad, stem 2″–3″ thick.

Ground in woods. Croghan. September.

The pure white color and soft texture is retained in the dried specimens.

Agaricus (Clitocybe) maculosus, *Peck.*

Pileus centrally depressed, smooth, marked with numerous watery spots when moist, having slight short radiating ridges on the margin; lamellae crowded, narrow, long-decurrent, pallid or yellowish, some of them forked; stem slightly thickened at the base, smooth, stuffed or hollow, colored like the pileus.

Plant 2′–3′ high, pileus 1.5′–2′ broad, stem 2″–3″ thick.

Ground in woods. Croghan. September.

The spots of the pileus resemble those of *Ag. marmoreus*. They generally disappear as the plant becomes dry.

Agaricus (Clitocybe) Truncicola, *Peck.*

Pileus thin, firm, expanded or centrally depressed, smooth, dry, white; lamellae narrow, thin, crowded, adnate-decurrent; stem equal, stuffed, smooth, often eccentric and curved, whitish.

Plant 1′ high, pileus 1′ broad, stem 1″ thick.

Trunks of frondose trees, especially maples. Croghan. September.

Agaricus (Clitocybe) subzonalis, *Peck.*

Pileus thin, centrally depressed or subinfundibuliform, marked with two or three obscure zones, with a slight appressed silkiness, pale yellow; lamellae close, narrow, equally decurrent, some of them forked, pallid or yellowish; stem equal, slightly fibrillose, stuffed, pale yellow.

Plant 2′ high, pileus 2′–3′ broad, stem 2″–4″ thick.

Ground in woods. Croghan. September.

Agaricus (Clitocybe) Gerardianus, *Peck.*

Pileus thin, funnel-form, hygrophanous, striatulate when moist, brown, rough with scattered blackish points; lamellae decurrent, close, a little paler than the pileus, some of them forked; stem rather long, flexuous, smooth, stuffed, concolorous, white at the base.

Plant 2′–3′ high, pileus 8″–12″ broad, stem .5″–1″ thick.

Sphagnous marshes. Sandlake and New Paltz. June.

Agaricus (Collybia) coloreus, *Peck.*

Pileus convex, subumblicate, slightly fibrillose, hygrophanous, yellow, sometimes tinged with red, the margin exceeding the lamellae; lamellae moderately close, emarginate, yellow; stem equal, smooth, hollow, sometimes eccentric, yellow.

Plant 1′–2′ high, pileus 8″–12″ broad, stem 1″ thick.

Decaying wood. Croghan. September.

Agaricus (Collybia) succosus, *Peck.*

Pileus firm, convex or campanulate, minutely tomentose, cinereous or brownish-gray, the margin generally exceeding the lamellae; lamellae thin, close, emarginate and slightly decurrent-toothed, tapering toward the outer extremity, whitish; stem firm, equal or slightly tapering upward, minutely tomentose, containing a whitish pith; spores minute, subglobose, .00015′ in diameter; flesh subcartilaginous, abounding in a thin watery or serum-like juice, changing to purplish or black when cut.

Plant 1′–3′ high, pileus 6″–12″ broad, stem 1′ thick.

Decaying prostrate trunks of trees in woods. Portville and Croghan. September.

This is a very remarkable and somewhat aberrant species. In color it resembles dark forms of *Heydnum gelatinosum*. The stem is sometimes eccentric. The juice exudes from wounds as in species of *Lactarius*.

Agaricus (Collybia) myriadophyllus, *Peck.*

Pileus very thin, broadly convex, then expanded, sometimes umbilicate, hygroyhanous, watery-brown when moist, pale ochraceous or alutaceous when dry; lamellae very numerous, crowded, narrow, rounded at the stem and slightly emarginate, brownish-lilac; stem equal, smooth, stuffed, reddish-brown; spores subelliptical, minute, .00012′ long.

Plant subcaespitose, 1′–1.5′ high, pileus 8″–12″ broad, stem .5″ thick.

Decaying wood and fallen branches in woods. Portville. September.

The color of the lamellae is remarkable.

Agaricus (Mycena) subcaeruleus, *Peck.*

Pileus very thin, convex or campanulate, obtuse, smooth, striate, pale bluish-green; lamellae narrow, close, tapering outwardly, white; stem slender, equal, pinkish-white, slightly pruinose; spores subglobose, .00025′ in diameter.

Plant caespitose, 2′ high, pileus 4″–8″ broad.

Trunks of beech trees in woods. Adirondack Mountains. July.

The disk is more highly colored than the margin and the pileus has a separable cuticle.

Agaricus (Mycena) minutulus, *Peck.*

Pileus convex or campanulate, smooth, striatulate, papillate; lamellae broad, subdistant, with a slight decurrent tooth; interspaces reticulated by transverse veinlets which descend on the lamellae; stem short, slender, firm, smooth or sprinkled with minute mealy particles.

Plant gregarious, white throughout, 8″–12″ high, pileus 2″–4″ broad.

Bark of prostrate trunks in woods. Portville. September.

Agaricus (Mycena) roseocandidus, *Peck.*

Pileus convex or broadly campanulate, subpapillate, striate nearly to the apex, white or rosy-red; lamellae close, uncinate, colored like the pileus; stem slender, smooth, white.

Plant 2′ high, pileus 4″–6″ broad.

Among mosses in woods. Adirondack Mountains. July.

Usually the whole plant is pure white, but sometimes the pileus has a delicate rosy hue except on the apex and the margin. The striations of the pileus remain in the dried specimens. The papilla is sometimes very prominent, sometimes wanting.

Agaricus (Mycena) miratus, *Peck.*

Pileus thin, campanulate, umbilicate, smooth, striate, cinereous; lamellae narrow, slightly uncinate, whitish; stem long, filiform, smooth, whitish, radicating, villous at the base.

Plant 1.5′–2′ high, pileus 3″–4″ broad.

Among fallen leaves in copses. Center. October.

This species may be known by the umbilicate pileus and the long striae which extend to the umbilicus.

Agaricus (Omphalia) olivarius, *Peck.*

Pileus convex, umbilicate, smooth, yellowish-olive; lamellae arcuate, decurrent, subdistant, pale yellow; stem equal, short, smooth, hollow, colored like the pileus; spores subglobose or broadly elliptical, .00026′ long.

Plant 1′–1.5′ high, pileus 1′ broad, stem 1″ thick.

Burnt ground under balsam trees. North Elba. July.

Agaricus (Omphalia) rugosodiscus, *Peck.*

Pileus thin, convex, then expanded, smooth, hygrophanous, striatulate when moist, brown, rugose-wrinkled on the disk, the thin margin often wavy; lamellae narrow, close, arcuate, decurrent, white; stem equal, short, smooth, hollow, often curved, whitish.

Plant 1′–1.5′ high, pileus 6″–12″ broad, stem .5″ thick.

Decaying prostrate trunks of trees in woods. Croghan and Worcester. July and September.

Agaricus (Pluteus) sterilomarginatus, *Peck.*

Pileus broadly convex or expanded, with a slight appressed tomentum, white faintly tinged with pink, the thin margin exceeding the lamellae; lamellae close, subventricose, free, minutely eroded on the edge, pale flesh color; stem short, equal, solid, smooth, whitish; spores subglobose, angular, with a central nucleus, .00025′ in diameter.

Plant 1′ high, pileus 6″–12″ broad, stem .5″ thick.

Decaying woods and sticks in woods. Portville. September. The pileus is sometimes cracked and then has the appearance of being coated with a thin scaly paste.

Agaricus (Pluteus) granularis, *Peck.*

Pileus convex or expanded, subumbonate, rugose-wrinkled, sprinkled with minute blackish granules, varying in color from yellow to brown; lamellae rather broad, close, ventricose, free, whitish, then flesh-colored; stem equal, solid, pallid or brown, usually paler at the top, velvety, with a short close plush; spores subglobose, about .0002′ in diameter.

Plant 2′–3′ high, pileus 1′–2′ broad, stem 1″–2″ thick.

Old logs in woods. Pine Hill and Worcester. July.

The granules form a sort of plush which is more dense on the disk of the pileus and its wrinkles than on the margin.

Agaricus (Entoloma) cyaneus, *Peck.*

Pileus convex, dry, minutely scaly, brown or brownish-violaceus; lamellae whitish, then tinged with flesh color; stem subequal, hollow, scaly and violaceous toward the top; spores angular, .00033′ × 00025′.

Plant 2′ high, pileus 1′–1.5′ broad, stem 1″ thick.

Decaying wood and old mossy trunks in woods. Pine Hill and Worcester. June and July.

Agaricus (Leptonia) foliomarginatus, *Peck.*

Pileus convex, umbilicate, scabrous on the disk, bluish-brown, the disk a little darker; lamellae broad, subdistant, plane, whitish, then flesh-colored, the edge entire and colored like the pileus; stem smooth, equal, solid below, with a small cavity above, concolorous.

Plant 1′–2′ high, pileus 6″–10″ broad, stem .5″ thick.

Ground and decaying wood in groves. Maryland. July.

Agaricus (Nolanea) fuscofolius, *Peck.*

Pileus thin, conical or campanulate, papillate, smooth, hygrophanous, dark brown and striatulate when moist, grayish-brown and shining when dry; lamellae ascending, narrowed toward each end, brown; stem equal, stuffed, smooth, concolorous, with a white mycelium at the base; spores irregular, nucleate, .00033′ × .00025′.

Plant 1′ high, pileus 3″–6″ broad, stem 5″ thick.

In woods on old logs. Maryland. July.

Agaricus (Pholiota) albocrenulatus, *Peck.*

Pileus fleshy, firm, convex or campanulate, subumbonate, viscid, rough with dark-brown or blackish floccose scales, yellowish-brown; lamellae broad, subdistant, emarginate, white crenulate on the edge, grayish, then ferruginous;

stem firm, equal or slightly tapering upward, stuffed or hollow, squamose and pallid below the evanescent ring, white and slightly furfuraceous above; spores subelliptical, .00045′ × .00025′.

Plant 3′–5′ high, pileus 2′–3′ broad, stem 3″–5″ thick.

Mossy base of maple trees in woods. Adirondack Mountains. July and August.

Under a lens the lamellae appear to be beaded on the edge with minute milky globules.

Agaricus (Pholiota) Acericola, *Peck.*

Pileus broadly convex, glabrous, rugose-reticulated or corrugated, hygrophanous, yellow; lamellae close, emarginate, grayish, then ferruginous-brown; stem equal or thickened at the base, hollow, fibrillose-striate, white; annulus large; spores elliptical, .00035′ × .00025′.

Plant 3′–4′ high, pileus 2′–3′ broad, stem 3″–5″ thick.

Mossy trunks of maple trees in woods. North Elba. August.

Agaricus (Pholiota) discolor, *Peck.*

Pileus thin, convex, then expanded or slightly depressed, smooth, viscid hygrophanous, watery-cinnamon and striatulate on the margin when moist, bright ochraceous yellow when dry; lamellae close, narrow, pallid, then pale ferruginous; stem equal, hollow, fibrillose-striate, pallid; annulus distinct, persistent; spores elliptical, .00028′ × .0002′.

Plant subcaespitose, 2′–3′ high, pileus 8′′–16′′ broad, stem 1″ thick.

Old logs in woods. Greig. September.

The change in color when passing from the moist to the dry state is very marked.

Agaricus (Pholiota) cerasinus, *Peck.*

Pileus broadly convex, smooth, hygrophanus, watery-cinnamon when moist, yellow when dry; lamellae close, emarginate, yellow, then cinnamon color; stem solid, equal, often curved, furfuraceous at the top; annulus slight, fugacious; flesh yellow; spores elliptical, rough, .0003′ × .0002′.

Plant caespitose, 2′–4′ high, pileus 2′–4′ broad, stem 2′–4′ thick.

Old prostrate trunks of trees in woods. Sterling. August.

When fresh it has a strong cherry-like or amygdaline odor.

Agaricus (Hebeloma) pallidomarginatus, *Peck.*

Pileus brittle, broadly convex, sometimes irregular, smooth, hygrophanous, brown with a pale margin when moist, ochraceous and subatomaceous when dry; lamellae close, thin, rounded and slightly emarginate at the stem, taper-

ing outwardly, ochraceous-brown; stem usually long and flexuous; equal or tapering upward, hollow, a little paler than the pileus, white-floccose at the base; spores subelliptical, .0004′ × .0002′.

Plant gregarious 1′–3′ high, pileus 6″–12″ broad, stem 1″ thick.

Ground in swamps and wet places. Sandlake. September.

Agaricus (Hebeloma) stellatosporus, *Peck.*

Pileus convex, dry, rough with numerous squarrose or erect scales, brown; lamellae pallid becoming brown; stem equal, scaly, concolorous; spores subglobose, rough with little nodules, .0003′ in diameter.

Plant 2′ high, pileus 1′ broad, stem 1″ thick.

Ground in woods. Croghan. September.

This plant bears a close resemblance to *Ag. mutatus*, but the persistent scales and rough spores distinguish it.

Agaricus (Hebeloma) griseoscabrosus, *Peck.*

Pileus hemispherical or convex, dry, rough with scales and appressed fibres, cinereous, the margin whitish when young; lamellae close, broad, whitish, then ochraceous-brown; stem firm, solid, fibrillose or slightly scaly, subconcolorous; spores smooth, .00035′ × .0002′.

Plant gregarious, 1.5′–2′ high, pileus 6″–10″ broad, stem 1″–1.5′′ thick.

Ground in open pine woods. Bethlehem. October.

Agaricus (Naucoria) bellulus, *Peck.*

Pileus thin, convex, moist, smooth, bright watery-cinnamon; lamellae crowded, narrow, emarginate, yellow, becoming darker with age; stem equal, hollow, often curved, smooth, reddish-brown; spores, .0002′ × .00014′.

Plant 1′ high, pileus 6′′–12′′ broad.

Decaying hemlock trunks in woods. Lowville and Sandlake. September.

It is sometimes caespitose. It is difficult to find a mature specimen of this plant in which the lamellae have not a stained or spotted appearance as if bitten by some small insect.

Agaricus (Naucoria) geminellus, *Peck.*

Pileus convex, even, firm, dry, yellowish-red, the margin paler; lamellae crowded, emarginate, pale yellow; stem equal, smooth, containing a white pith or a small cavity, colored like the pileus; flesh white; spores .00033′ × 0002′.

Rotten wood. Croghan. September.

The dimensions and habit are the same as in the last species, to which this is clearly related. Its lamellae also have the same peculiar appearance.

Agaricus (Naucoria) discomorbidus, *Peck.*

Pileus thin, convex or expanded, smooth, slightly viscid, reddish-brown or dull chestnut; lamellae narrow, crowded, minutely serrulate, white or pallid, then brownish; stem equal, stuffed, smooth, slightly mealy at the top, white; flesh white; spores nucleate, .0004′ × .00025′.

Plant 2′–3′ high, pileus 1′–1.5′ broad, stem 1″–2″ thick.

Ground in woods. Croghan and Copake. September and October.

In the dried specimens the disk has a dark discolored appearance as if beginning to decay.

Agaricus (Galera) expansus, *Peck.*

Pileus submembranaceous, expanded or depressed, viscid, plicate striate on the margin, brownish-ochre, sometimes tinged with yellow and pink hues; lamellae close, ferruginous; stem long, equal, hollow, slightly pruinose, faintly striate, yellow; spores .00045′ × .00028′.

Plant 3′–4′ high, pileus 1′ broad, stem 1″ thick.

Decaying wood. Sandlake and Memphis. August.

Agaricus (Galera) callistus, *Peck.*

Pileus thin, expanded, subumbonate, smooth, viscid, striatulate on the margin, olivaceous or ochraceous, the umbo or disk bright chestnut color; lamellae thin, close, ventricose, easily separating from the stem, yellowish, becoming bright ferruginous; stem equal, hollow, pruinose, yellow, spores .00035′ × .0002′.

Plant 1′–1.5′ high, pileus 6″–10″ broad, stem .5″ thick.

Exsiccated water-holes in wooded swamps. Croghan. September.

In the dried specimens the lamellae are white on the edge and the pileus has assumed a dull metallic green color.

Agaricus (Galera) Coprinoides, *Peck.*

Pileus membranaceous, soon expanded, often split on the margin, plicate-sulcate to the small even disk, yellowish inclining to ochre; lamellae close, slightly rounded behind, concolorous; stem equal, short, hollow, minutely hairy-pruinose, white; spores .00028′ × .0002′.

Plant 1′ high, pileus 6″ broad, stem .5″ thick.

Grassy ground. Sterling. August.

The appearance of the pileus is suggestive of some of the smaller Coprini.

Agaricus (Crepidotus) Herbarum, *Peck.*

Pileus thin, at first resupinate, with the margin incurved, clothed with white down, at length somewhat reflexed, less downy, the margin spreading; lamellae narrow, not crowded, diverging from a naked lateral or eccentric point, white, then tawny; spores slightly curved, .00028′ × .00014′.

Pileus 2″–4″ broad.

Dead stems of herbs. North Greenbush. October.

Agaricus (Psalliota) diminutivus, *Peck.*

Pileus expanded or centrally depressed, sometimes with a slight umbo, dry, alutaceous, the disk rosy-brown and spotted with small appressed silky scales; lamellae close, thin, free, ventricose, brownish-pink, becoming black; stem equal or slightly tapering upward, hollow or stuffed with a whitish pith, smooth, pallid; annulus thin, persistent, white; spores .0002′ × .00015′.

Plant 1.5′–2′ high, pileus 1′–1.5′ broad, stem 1″–2″ thick.

Ground in woods. Croghan. September.

Sometimes the whole pileus is reddish-brown. The flesh is quite brittle.

Agaricus (Stropharia) Howeanus, *Peck.*

Pileus convex, then expanded, fragile, smooth, subumbonate, yellowish; lamellae close, thin, rounded behind, eroded on the edge, whitish becoming ferruginous-brown; stem smooth, hollow, slightly thickened at the base; annulus thin, fugacious, sometimes adhering to the margin of the pileus; flesh white; spores .00033′ × .0002′.

Plant 3′–4′ high, pileus 2′–3′ broad, stem 2″–4″ thick.

Center. June.

The surface of the pileus sometimes cracks into areas. The taste is bitter. The color of the spores is not a decided brown, and the plant might with almost equal propriety be referred to the subgenus Pholiota.

Agaricus (Hypholoma) hirtosquamulosus, *Peck.*

Pileus hairy-squamulose, hygrophanous, grayish-brown when moist, gray when dry; lamellae narrow, rounded at the stem, gray, then brown; stem short, firm, equal, hollow, slightly hairy-squamulose and colored like the pileus; spores subelliptical, nucleate, .00025′ long.

Plant 1′ high, pileus 6″–10″ broad, stem .5″ thick.

Prostrate trunks of maple trees in woods. Portville. September.

Agaricus (Hypholoma) phyllogenus, *Peck.*

Pileus firm, convex, sometimes slightly umbonate, hygrophanus, reddish-brown when moist, alutaceous when dry; lamellae plane, broad, close, brown, white on the edge; stem equal, fibrillose, stuffed or hollow, expanded at the base into a thin flat disk; spores pale-brown, subglobose, .0002′ in diameter.

Plant 8″–12″ high, pileus 2″–4″ broad, stem .5″ thick.

Fallen leaves in woods. Worcester. July.

This is a very small but distinct species, remarkable for the disk-like base of the stem by which it is attached to the leaves on which it grows.

Coprinus variegatus, *Peck.*

Pileus fleshy, fragile, oblong-ovate, then campanulate, obtuse, hygrophanous, pale watery-brown when moist, whitish or cream colored when dry, variegated by scales and patches of a superficial ochraceous tomentum, the margin finely striate; lamellae lanceolate, crowded, ascending, free, white, then rosy-brown, finally black; stem equal, brittle, hollow, white, at first peronate-annulate, then floccose-pruinose, with white branching root-like threads at the base; spores .00033′ long.

Plant densely caespitose, 3′–5′ high, pileus 1′–1.5′ broad, stem 2″–4″ thick.

Thin soil and decaying leaves covering rocks. Slope of Crows' Nest near West Point. June.

Allied to *C. atramentarius*. When young the whole plant is coated by an abundant superficial tomentum. This soon breaks up into loose scales or patches which peel off in flakes, revealing the smooth pileus beneath. The slight abrupt annulus soon vanishes.

Coprinus insignis, *Peck.*

Pileus campanulate, thin, sulcate-striate to the disk, grayish fawn-color, the smooth disk sometimes cracking into small areas or scales; lamellae ascending, crowded; stem hollow, slightly fibrillose, striate, white; spores rough, .0004′ × .00028′.

Plant 4′–5′ high, pileus 2′–3′ broad, stem 3″ thick.

About the roots of trees in woods. Worcester. July.

Coprinus angulatus, *Peck.*

Pileus thin, hemispherical or convex, plicate-sulcate, the disk smooth; lamellae subdistant, whitish, then black; stem equal, smooth, whitish; spores compressed, angular, subovate, .0004′ × .00033′.

Plant 1′–2′ high, pileus 6″–12″ broad, stem .5″ thick.

Woods. Croghan. September.

The specific name has reference to the angular character of the spores.

Cortinarius (Myxacium) sphaerosporus, *Peck.*

Pileus convex, smooth, very viscid, pale ochraceous; lamellae close, nearly plane, slightly emarginate, whitish, then cinnamon; stem tapering upward, solid, floccose, viscid, subconcolorous, white at the top; flesh white; spores nearly globose, about .0003′ in dameter.

Plant 2′–4′ high, pileus 2′–3′ broad, stem 3″–5″ thick.

Ground in woods. Croghan. September.

Cortinarius (Phlegmacium) longipes, *Peck.*

Pileus convex or expanded, slightly fibrillose, viscid, yellowish or pale ochraceous; lamellae close, plane, brownish-olivaceous, then cinnamon; stem long, slightly fibrillose, tapering upwards, whitish.

Plant 6′ high, pileus 2′–3′ broad, stem 4″ thick.

Ground in woods. Croghan. September.

Cortinarius (Inoloma) lilacinus, *Peck.*

Pileus firm, hemispherical, then convex, minutely silky, lilac; lamellae close, lilac, then cinnamon; stem stout, bulbous, silky fibrillose, solid, whitish tinged with lilac; spores nucleate, .0004′ × .00025′.

Plant 4′–5′ high, pileus 3′ broad, stem 4″–6″ thick.

Low mossy ground in woods. Croghan. September.

Cortinarius (Inloma) Clintonianus, *Peck.*

Pileus convex or expanded, with a few appressed silky fibrils, reddish-brown tinged with gray; lamellae close, dull violaceous, then cinnamon; stem solid, silky-fibrillose, tapering upwards, violaceous at the top; spores .0003′ × .00025′.

Plant 2′–3′ high, pileus 1′–2′ broad, stem 2″–3″ thick.

Ground in woods. Croghan and New Scotland. September.

Cortinarius (Inoloma) modestus, *Peck.*

Pileus convex or expanded, subfibrillose, even or slightly rugose-wrinkled, alutaceous; lamellae close, nearly plane, pallid, then cinnamon; stem bulbous, subfibrillose, hollow or with a white pith, concolorous; flesh white; spores .00033′ × .00025′.

Plant 2′ high, pileus 1′–1.5′ broad, stem 2″ thick.

Ground in woods. Croghan. September.

It is distinguished from the preceding species by its paler color, more bulbous stem, and the entire absence of violaceous hues in the lamellae.

Cortinarius (Telamonia) lignarius, *Peck.*

Pileus smooth, hygrophanous, dark watery cinnamon when moist, paler when dry; lamellae close, thin, concolorous, when young concealed by the copious white webby veil; stem equal, silky-fibrillose, hollow or with a whitish pith, subannulate, with a dense white mycelium at the base; spores .00028′ × .0002′

Plant subcaespitose, 1′–2′ high, pileus 8″–12″ broad, stem 1″ thick.

Rotten wood. Catskill mountains. June.

Cortinarius (Telamonia) nigrellus, *Peck.*

Pileus at first conical, then convex or expanded, obtuse or subumbonate, minutely silky, hygrophanous, blackish chestnut when moist, paler when dry; lamellae close, narrow, emarginate, brownish-ochre, then cinnamon; stem subequal, silky fibrillose, pallid, often flexuous; annulus slight, evanescent; spores .00028′ × 00016′.

Plant 2′–3′ high, pileus 1′–2′ broad, stem 2″–3″ thick.

Mossy ground in woods. New Scotland. October.

When moist the pileus has the color of boiled chestnuts, when dry, of fresh ones. The incurved margin of the young pileus is whitened by the veil. The lamellae are darkest when young.

Cortinarius (Heygrocybe) pulcher, *Peck.*

Pileus conical, then broadly convex, umbonate, often irregular, hygrophanous, ochraceous, shining and sometimes striatulate when moist, pale ochraceous when dry; lamellae subdistant, broad, emarginate, uneven on the edge, ochraceous, stem equal, solid, subflexuous, silky-fibrillose, whitish or pale ochraceous; spores .00033′ × .0002′.

Plant gregarious, 2′ high, pileus 1′–1.5′ broad, stem 1″–2″ thick.

Ground in woods. New Scotland. October.

Paxillus strigosus, *Peck.*

Pileus dry, convex or expanded, brittle, strigose with scattered stiff hairs, whitish; lamellae close, narrow, subdecurrent, whitish then pale cinnamon color, some of them forked; stem equal, solid, pruinose, concolorous; spores brownish-ochre, subglobose, .00018′ in diameter.

Plant 2′ high, pileus 1′–1.5′ broad, stem 1″–1.5″ thick.

Ground among fallen leaves in woods. Caraghan. September.

The young plant might readily be mistaken for a species of Clitocybe. Owing to the very brittle character of the pileus, the lamellae are not easily separated from it. The hairs of the pileus are either erect or appressed.

Lactarius regalis, *Peck.*

Pileus convex, deeply depressed in the center, viscid when moist, often corrugated on the margin, white tinged with yellow; lamellae close, decurrent, whitish, some of them forked at the base; stem stout, short, equal, hollow, smooth; taste acrid; milk sparse, white quickly changing to sulphur-yellow; spores .0003′.

Plant 4′–6′ high, pileus, 4′–6′ broad, stem 1′ thick.

Ground in woods. Croghan, September.

This interesting plant rivals *L. piperatus* in size and closely resembles it in general appearance, but the viscid pileus and sparse milk quickly changing to yellow, as in *L. chrysorrheus*, clearly distinguish it.

Lactarius Geradii, *Peck.*

Pileus expanded or centrally depressed, dry, rugose-wrinkled, often with a minute umbo or papilla, sooty-brown, the thin spreading margin sometimes wavy or irregular; lamellae broad, distant, decurrent, white, the interspaces uneven; stem equal, solid, colored like the pileus; flesh and spores white; taste mild; milk white and unchangeable.

Plant 3′–5′ high, pileus 2′–4′ broad, stem 4″–6″ thick.

Ground in woods and groves. Poughkeepsie, *W. R. Gerard.* Albany and Croghan. September.

In the color of the pileus and stem, this species is like the large variety of *L. fuliginosus*, but its real relationship is with *L. distans*, from which it is separated by its color and its longer equal stem, characters which may prove to be only varietal.

Russula sordida, *Peck.*

Pileus firm, convex, centrally depressed, dry, sordid white, sometimes clouded with brown; lamellae white, some of them forked; stem equal, solid, concolorous; spores globose, .0003′; taste acrid; flesh changing color when wounded, becoming black or bluish-black.

Plant 4′–5′ high, pileus 3′–5′ broad, stem 6″–12″ thick.

Ground under hemlock trees. Worcester. July.

The whole plant turns black in drying.

Marasmius semihirtipes, *Peck.*

Pileus thin, tough, nearly plane or depressed, smooth, sometimes striate on the margin, hygrophanous, reddish-brown when moist, alutaceous when dry, the disk sometimes darker; lamellae subdistant, reaching the stem, slightly

venose-connected, subcrenulate on the edge, white; stem equal, hollow, smooth above, velvety-tomentose toward the base, reddish-brown.

Plant gregarious, 1′–2′ high, pileus 6″–9″ broad, stem .5″ thick.

On and among fallen twigs and leaves. West Point. June.

Marasmius umbonatus, *Peck.*

Pileus thin, tough, expanded, umbonate, smooth, even or substriate, alutaceous, the margin at first incurved; lamallae narrow, subdistant, reaching the stem, venose-connected, sometimes branched toward the outer extremity, white; stem equal, solid, velvety-tomentose, tawny below, paler above.

Plant gregarious, 1′–1.5′ high, pileus 6″–9″ broad, stem .5″ thick.

Ground under balsam trees. North Elba. July.

Marasmius caespitosus, *Peck.*

Pileus fleshy, convex, even, brown, with a lilac tint, the thin margin exceeding the lamallae; lamellae close, free, somewhat united with each other at the stem, narrowed outwardly, white; stem sometimes compressed at the top, stuffed or hollow, pruinose.

Plant caespitose, 1′–2′ high, pileus 6″–10″ broad.

Birch stumps in woods. Richmondville, June.

Marasmius longipes, *Peck.*

Pileus thin, convex, smooth, finely striate on the margin, tawny-red; lamellae white; stem tall, straight, equal, hollow, pruinose-tomentose, radicating, brown or fawn color, white at the top.

Plant 2′–5′ high, pileus 4″–6″ broad, stem .5″ thick.

Among fallen leaves in woods. Savannah and Bethlehem. August and October.

The long straight slender stem is a characteristic feature of this plant.

Marasmius glabellus, *Peck.*

Pileus membranaceous, convex, then expanded, distantly striate, often uneven on the disk, dingy-ochraceous; lamellae broad, distant, unequal free, ventricose, whitish, the upper margin and the interspaces venose; stem corneous, equal, smooth, shining, hollow, reddish-brown or chestnut, whitish at the top, with a thick mycelium at the base.

Plant 1′–2′ high, pileus 6″–10″ broad, stem .5″ thick.

Fallen leaves in woods. Worcester and Croghan. July and September.

Marasmius straminipes, *Peck.*

Pileus membranaceous, hemispherical or convex, smooth, striate, whitish; lamellae distant, unequal, white; stem corneous, smooth, shining, filiform, inserted, pale straw color.

Plant 1′–2′ high, pileus 1″–3″ broad.

Fallen leaves of the pitch pine, *Pinus rigida.* Center. October.

Lenzites vialis, *Peck.*

Pileus coriaceous, sessile, dimidiate or elongated, sometimes confluent, obscurely zoned, subtomentose, brown or grayish-brown, the margin cinereous; lamellae thin, anastomosing abundantly, pallid, cinereous-pruinose on the edge when fresh.

Pileus 6″–12″ long.

Old railroad ties. North Greenbush and Center. October.

Boletus separans, *Peck.*

Pileus thick, convex, smooth, shining, sometimes deeply lacunose, brownish-lilac; tubes plane or slightly depressed around the stem, at first quite closed and attached to the stem, then by the expansion of the pileus usually torn from it, small, subrotund, yellow or brownish-yellow; stem solid, nearly equal, distinctly reticulated, dull lilac; spores .00055′ × .00022′; flesh white, unchangeable.

Plant 3′–4′ high, pileus 3′ broad, stem 6″–10″ thick.

Grassy ground in open woods. Greenbush. August.

In dry weather the separation of the tubes from the stem does not always take place.

Boletus affinis, *Peck.*

Pileus dry, minutely tomentulose, even or slightly rugose, chestnut colored, soon fading to tawny or ochraceous, the cuticle sometimes cracking into areas; tubes plane or convex, attached to the stem and sometimes depressed around it, at first white and closed, then yellow, small, unequal, angular or subrotund; stem solid, unequal, smooth, rarely reticulated at the top, pallid or tinged with dull red; spores .00035′ × .00016′; flesh white, unchangeable.

Plant 2′–3′ high, pileus 2′–3′ broad, stem 6″–10″ thick.

Grassy ground in open woods. Greenbush. July.

Boletus modestus, *Peck.*

Pileus firm, often irregular, dry, yellowish-brown; tubes nearly plane, attached and subdecurrent, pale ochraceous, angular and compound; stem

equal, brown, reticulated with darker lines; spores .0004′ × .0002′; flesh gray or pinkish gray.

Plant 2′ high, pileus 2′ broad, stem 2″–4″ thick.

Grassy ground in open woods. Greenbush. August.

Boletus pallidus, *Frost.*

Pileus soft, viscid when moist, smooth, pale alutaceous; tubes plane, attached to or sometimes slightly depressed around the stem, small, subangular, pale yellow, slightly changing color when wounded; stem subequal, smooth, solid, pallid; spores .00045′ × .00022′.

Plant 2′–5′ high, pileus 2′–4′ broad, stem 4″–6″ thick.

Ground in woods. North Greenbush. August.

Boletus ampliporus, *Peck.*

Pileus broadly convex or expanded, sometimes slightly umbonate, dry, squamulose-tomentose, pinkish-brown; tubes convex, attached or slightly decurrent, very large, angular, compound, yellow; stem equal, solid, yellowish-brown, paler at the top, and marked by the decurrent walls of the tubes; flesh whitish tinged with yellow, unchangeable; spores pale ochraceous, with a greenish tinge, 00035′ × .00016′.

Plant 3′–5′ high, pileus 3′–4′ broad, stem, 3″–6″ thick.

Low mossy ground in woods. North Elba and Sandlake. August and September.

Polyporus caeruleoporus, *Peck.*

Pileus fleshy, broadly convex, subtomentose, moist or hygrophanous, brown; pores short, angular, decurrent, grayish-blue; stem central or eccentric, solid, colored like the pileus, sometimes tinged with the color of the pores; flesh white.

Plant gregarious or subcaespitose, 2′ high, pileus 1′–2′ broad, stem 2″–3″ thick.

Shaded banks. Copake. October.

This and the three following species belong to the section *Mesopus.*

Polyporus griseus, *Peck.*

Pileus fleshy, firm, convex, often irregular, smooth or with a minute appressed silkiness, dry, gray; pores small, short, unequal, subangular, pallid, the mouths white; stem central, thick, short, concolorous; flesh pinkish-gray.

Plant 2′–3′ high, pileus 3′–5′ broad, stem 6″–10″ thick.

Shaded banks. Copake. October.

Polyporus flavidus, *Peck.*

Pileus fleshy, tough, depressed or funnel-form, smooth, rarely a little villous on the disk, zonate, yellow with darker bands, the margin sometimes lobed or wavy; pores short, minute, angular, yellow; stem central, solid, slightly tapering downwards, smooth, subconcolorous.

Plant 3′–5′ high, pileus 2′–4′ broad, stem 3″–4″ thick.

Ground in woods. Worcester. July.

Polyporus splendens, *Peck.*

Pileus thin, coriaceous, expanded, subumbilicate, slightly zonate, silky, shining, dark ferruginous when moist, tawny ferruginous when dry, the margin deeply fimbriate; pores small, angular, short, subconcolorous; stem slender, equal, tomentose, concolorous.

Plant 1′ high, pileus 6″–10″ broad, stem .5″–1″ thick.

Much decayed stumps. Center. August.

Polyporus attenuatus, *Peck.*

Resupinate, effused, very thin, separable from the matrix, pinkish-ochre, the margin whitish; pores minute, subrotund, with thin acute dissepiments.

Prostrate trunks of deciduous trees. Croghan. September.

The pores are scarcely visible to the naked eye.

Craterellus caespitosus, *Peck.*

Pileus fleshy, tough, irregular, expanded, centrally depressed or funnel-form, smooth, moist, variable in color, greenish-yellow, pinkish-brown, or blackish; the margin sometimes decurved and lobed; hymenium at first smooth, then rugose-wrinkled, the folds decurrent on the short, solid, tough stem which is either central or eccentric; spores oblong, obtuse, sometimes slightly curved, .00035′–.00045′ long.

Plant caespitose, 6″–12″ high, pileus 6″–10″ broad.

Decaying wood in swamps. Portville. September.

The pilei sometimes grow together, forming an intricate irregular tuft.

Grandinia coriaria, *Peck.*

Effused, membranaceous-tomentose, separable from the matrix, under side and margin tawny-yellow, upper side and minute crowded granules greenish or dingy olivaceous; spores globose, rough, .0003′ in diameter.

Forming patches 1′–3′ in diameter on old scraps of leather in damp places. Greenbush. August.

Thelephora Willeyi, *Clinton.*

Pileus funnel-formed, thin, smooth, obscurely zoned, white, the margin entire or laciniately toothed and lobed; hymenium smooth, concolorous; stem central, equal, solid, white.

Plant 1′–1.5′ high, pileus 6″–12″ broad, stem .5″–1″ thick.

Ground in woods. Buffalo. *G. W. Clinton.* Lowville. September. Sometimes the pileus is split on one side down to the stem.

Stereum radiatum, *Peck.*

Resupinate or slightly reflexed, suborbicular, blackish-brown; hymenium uneven, marked with thick corrugations or ridges radiating from the center, cinnamon color.

Old hemlock logs. Catskill Mountains. June.

Corticium bicolor, *Peck.*

Thin, membranaceous, resupinate, flaccid, smooth, separable from the matrix, under surface greenish-yellow, upper surface white.

Rotten wood. Center. October.

Clavaria pusilla, *Peck.*

Stem slender, solid, rather tough, much and irregularly branched; branches unequal, divergent, tips acute.

Plant scarcely 1′ high, yellowish.

Ground under spruce and balsam trees. North Elba. September.

Clavaria clavata, *Peck.*

Simple, straight, clavate, obtuse, smooth, not hollow, yellow when fresh, rugose-wrinkled and orange colored when dry.

Plant 4″–6″ high.

Damp shaded banks by roadsides. Sandlake. June.

The surface of the ground where it grows is covered by a stratum of green confervoid filaments. The species is related to *C. mucida.*

Tremella colorata, *Peck.*

Plant gregarious, swollen subglobose or irregular soft pulpy and raisin-colored when moist, externally black and internally brownish-pink when dry; filaments colored in the mass; spores globose, colored like the hymenium when mature, .0005′–.0007′ in diameter.

Bark of dead ash trees. Tyre. September.

Exobasidium Azaleae, *Peck.*

Gall subglobose, often lobed or irregular, succulent, fleshy, solid, smooth pale green or glaucous becoming pruinose; spores oblong, straight or curved, obscurely uniseptate, white, .0006′–.0008′ long.

Terminal on living twigs of the pinxter plant, *Azalea nudiflora*, transforming the flower buds.

North Greenbush and New Scotland. May and June.

Exobasidium Andromedae, *Peck.*

Gall flattened or somewhat cup shaped, more or less lobed, smooth, pale green or green varied with red, becoming paler and pruinose with age, hollow, the cavity containing shreds of loose soft cottony filaments; spores narrow, oblong, simple, often curved near one end, white, .0007′–.0009′ long.

Lateral on living branches of *Andromeda ligustrina*, transforming the leaf buds.

Center. May and June.

GASTEROMYCETES.

Lycoperdon pedicellatum, *Peck.*

Subpyriform, whitish, the outer peridium persistent, forming dense angular spinose processes which are smaller toward the base of the plant; capillitium and spores greenish ochre or dingy olivaceous; spores smooth, pedicellate, globose, .00016′–.00018′ in diameter, the pedicel three to five times as long.

Ground and rotten wood. Croghan and Center. September and October.

The spores resemble those of species of Bovista.

Diderma crustaceum, *Peck.*

Effused or circumambient, crowded, sessile, subglobose, smooth, white, outer peridium crustaceous, resembling the shell of some small egg, the inner delicate, appearing cinereous to the naked eye, iridescent under the microscope; columella none; spores globose, black, .0005′ in diameter.

Diderma farinaceum, *Peck.*

Effused or circumambient, crowded, sessile, subglobose, plumbeous when moist or young, white rugulose and farinaceous when dry; spores globose, brown, black in the mass, .0004′ in diameter.

Incrusting mosses and fern stems in low woods. Croghan. September.

Diderma Mariae-Wilsoni, *Clinton.*

Scattered or crowded, sessile, subglobose, smooth, white or pinkish-white, outer peridium crustaceous, within at the base brownish-pink, inner peridium delicate; columella subglobose, rugulose, slightly colored; spores globose, blackish-brown, .0004′ in diameter.

Fallen leaves, sticks, moss, etc. Buffalo, *Clinton.* Memphis, Center and Sandlake. August and October.

Didymium connatum, *Peck.*

Peridium depressed or subglobose, cinereous, furfuraceous, stipitate; stems mostly connate at the base, tapering upward, longitudinally wrinkled, whitish or cream color; spores subglobose, black, .0004′ in diameter.

Decaying fungi. Portville. September.

The subfasciculate mode of growth is a marked feature in this species.

Physarum pulcherripes, *Peck.*

Peridium globose, variable in color, ochraceous, gray, brown or black; stem slender, equal or slightly tapering upwards, vermillion; spores globose, brown, .00033′ in diameter.

Rotten wood. Richmondville and Worcester. July.

The bright color of the stem is quite conspicuous, notwithstanding the small size of the plant.

Physarum caespitosum, *Peck.*

Peridia aggregated in tufts or clusters, crowded, sessile, smooth, brown or blackish-brown; spores dingy ochre, smooth, globose, .00025′ in diameter.

Decaying wood. Greenbush. August.

Craterium obovatum, *Peck.*

Peridium obovate, rugose-wrinkled, glabrous, lilac-brown; flocci whitish; stem colored like the peridium; spores smooth, globose, black, .0005′–.0006′ in diameter.

Decaying wood and fallen leaves. Center, Sandlake and Croghan. August and September.

The operculum is not always distinct, the peridium appearing frequently to be irregularly ruptured at the apex.

Stemonitis herbatica, *Peck.*

Densely fasciculate; capillitium slender, cylindrical, brown when moist, ferruginous-brown when dry; stem black, arising from a membranaceous

hypothallus, penetrating to the apex of the capillitium; spores globose, .0003′–.00035′ in diameter.

Plant 2″–3″ high, growing on living leaves of grass and herbs. Albany. June.

The color of this plant is almost the same as that of *S. ferruginea*, but the spores are much larger, surpassing even those of *S. fusca*.

Trichia reniformis, *Peck.*

Peridia gregarious or clustered, sessile, subglobose or reniform, small, brown; flocci few, short, sparingly branched; spores globose, minutely echinulate, yellow-ochre, sometimes tinged with green, .0005′ in diameter.

Dead bark of striped maple, *Acer Pennsylvanicum*. Portville. September.

The branches and apices of the flocci are sometimes without spiral markings and slightly nodulose.

Perichaena flavida, *Peck.*

Yellow throughout; peridia crowded, clustered, sessile, variable in size and shape, shining; flocci few, short, subnodulose, obtuse, sparingly branched; spores globose, enchinulate, .00045′ in diameter.

Mosses. Sandlake. August.

The bright golden yellow color renders the clusters conspicuous.

CONIOMYCETES.

Dinemasporium Robiniae, *Gerard.*

Perithecia cup-shaped, bristly, black; spores hyaline, .0002′ long, the terminal bristles about as long as the spore.

Dead wood of locust trees. Poughkeepsie, *Gerard.*

Dinemasporium acerinum, *Peck.*

Perithecia small, pezizoid, black, hispid with short straight scattered black hairs; spores unequally elliptical, .0003′ long, the terminal bristles scarcely one-third the length of the spore.

Dry maple wood. Buffalo, *Clinton*. April.

Puccinia pulchella, *Peck.*

Spots yellow or greenish-yellow, orbicular, rarely confluent; sori small, circinating, sometimes confluent, blackish-brown; spores .001′–0013′ long, .0006′ broad.

Upper surface of leaves of *Ribes prostratum.* North Elba. July.

Puccinia Cryptotaeniae, *Peck.*

Spots small, pallid or yellowish, sometimes tinged with purple, dotted by the sori, occasionally confluent; sori minute, clustered, at first covered by the epidermis, then surrounded by its pale ruptured remains which continue in the form of a small pustule with a contracted subcircular opening at the apex, reddish-brown; spores subelliptical, scarcely constricted, crowned with a hyaline pustule, .0011′–.0016′ long, .0006′ broad.

Under surface of leaves of *Cryptotaenia Canadensis.* North Greenbush. June.

Puccinia Mariae-Wilsoni, *Clinton.*

Amphigenous; spots none; sori scattered or clustered, unequal, reddish-brown; spores subelliptical, scarcely constricted, crowned with a pustule, .0013′–.0018′ long, .0007′–0008′ broad.

Leaves and stems of *Claytonia Caroliniana.* Buffalo, *Clinton.* Knowersville. May.

Puccinia Lobeliae, *Gerard.*

Sori minute, scattered or confluent, tawny-brown; spores oblong-elliptical, slightly constricted at the septum and easily separating into two parts, pale, .0013′–0016′ long; pedicel short or obsolete.

Under surface of leaves of *Lobelia syphilitica.* Poughkeepsie, *Gerard.* The fragile spores are peculiar.

Puccinia obtecta, *Peck.*

Cauline; sori unequal, often very large, angular or orbicular, scattered or confluent, slightly elevated, long covered by the epidermis, black; spores oblong or oblong-clavate, sometimes curved, constricted, obtuse or obtusely pointed, .0018′–.0024′ long, .0008′ broad; pedicel colored, seldom half as long as the spore.

Stems of *Scirpus validus* and *S. pungens.* Watkins, Montezuma Marshes and Albany. September and October.

Puccinia linearis, *Peck.*

Amphigenous; sori very narrow, deep seated, oblong or linear, parallel, crowded, long covered by the epidermis, black; spores oblong, slightly tapering toward the base, not constricted, very obtuse or truncate, .0018′–0024′ long, .0006′ broad; pedicel colored, very short.

Leaves and sheaths of grasses. Watkins. September.

This is related to *Puccinia coronata*, but it is without the apical teeth of the spore.

Puccinia angustata, *Peck.*

Hypogenous; spots pallid or none; sori oblong or linear, sometimes regularly arranged at equal intervals in long parallel lines, narrow, black; spores narrow, oblong-clavate or elongated, septate above the middle, strongly constricted, having the lower cell more narrow than the upper, and cylindrical or slightly tapering downwards, .00018′–.0024′ long, .0006′ broad; pedicel colored, thick, very short.

Leaves of *Scirpus sylvaticum* and *S. Eriophorum*. West Albany and Watkins. September.

Protomyces Erythronii, *Peck.*

Spots stained with red or purple; spores growing in the tissues of the leaf, scattered or crowded, most often arranged in short series and erumpent through narrow chinks in the epidermis, large, globose, at length black, .002′–.0026′ in diameter.

Leaves and petioles of *Erythronium Americanum*. Greenbush. May.

The leaf is most frequently affected at the base of the lamina or blade.

Ustilago Erythronii, *Clinton.*

Produced on the leaves in oblong or irregular vesicular patches, half an inch or more in length; spores globose, rough, rather large, .0006′–.00075′ in diameter, black in the mass.

Leaves of *Erythronium Americanum*. Goat Island, *Clinton*.

Uredo Ledicola, *Peck.*

Spots small, definite, rarely confluent, suborbicular, reddish-brown, sometimes with a darker border; sori subrotund or irregular, surrounded by the ruptured epidermis; spores subglobose, rough, .0012′ in diameter, orange, with a thick hyaline epispore.

Upper surface of leaves of *Ledum latifolium*. Mt. Marcy. July.

Apparently quite distinct from *U. Ledi* A. & S.

Peridermium Cerebrum, *Peck.*

Peridia large, convex, erumpent, irregularly confluent, forming brain-like convolutions, white, rupturing irregularly, the cells radiate-striate on the margin; spores ovate-elliptical or subglobose, rough, yellow, .0008′–.0011′ long.

Trunks and branches of young pine trees, *Pinus rigida*, forming excrescences half an inch to two inches in diameter. Center, *J. A. Lintner.*

Roestelia aurantiaca, *Peck.*

Peridia cylindrical, fragile, soon lacerated, fugacious, white; spores subglobose, bright orange, about .001′ in diameter, with a thick hyaline epispore.

Unripe fruit of *Amelanchier Canadensis.* New Baltimore, *J. L. Zabriskie.* Keene. July. Also on the unripe fruit of *Crataegus.* Buffalo, *Clinton.*

The color of the spores will enable this species to be easily recognized.

Aecidium Gerardiae, *Peck.*

Spots small, suborbicular, scattered, yellowish-green, peridia usually few, small, short, the mouth fringed with spreading or recurved teeth; spores orange, .0008′ in diameter.

Leaves of *Gerardia quercifolia.* Highlands near Cold Spring. June.

Aecidium album, *Clinton.*

Spots none; peridia scattered, short, white, the margin subentire; spores subglobose, white, about .0008′ in diameter.

Under surface of leaves of *Vicia Americana.* Buffalo, *Clinton.*

Aecidium Lycopi, *Gerard.*

Spots yellow; subiculum more or less thickened; peridia short, scattered or crowded, margin crenate; spores pale yellow.

Leaves, stems and petioles of *Lycopus Europaeus.* Poughkeepsie, *Gerard.* Buffalo, *Clinton.* June.

Aecidium Hydrophylli, *Peck.*

Spots small, few, yellow, with a pale greenish border; subiculum thickened whitish; peridia few, generally crowded, short, the margin subcrenate; spores bright yellow or orange; spermogonia central, on the opposite side.

Under surface of leaves of *Hydrophyllum Canadense.* Catskill Mountains. June.

HYPHOMYCETES.

Stilbum ramosum, *Peck.*

Head subglobose, whitish or pale yellow; stem thick, smooth, branched, white above, pallid or brownish below, sometimes creeping and sending up branches at intervals; spores minute, oblong.

Dead larvae of insects buried in rotten wood. Sterling. September.

Periconia Azaleae, *Peck.*

Plant small, .03′–04′ high, black; stem slightly tapering upward; head globose; spores subglobose or elliptical, colored, .0002′–.0003′ long.

Twigs, capsules and old galls of *Azalea nudiflora.* New Scotland. June.

Macrosporium Chartarum, *Peck.*

Flocci long, jointed, flexuous, branched, colored; branches widely spreading, somewhat nodulose; spores variable, subglobose, elliptical, obovate or pyriform, black, shining, one to three septate, with one or two longitudinal septa, .0006′–001′ long.

Damp paste board. Albany. November. It forms indefinite black spots or patches.

Clasterisporium pedunculatum, *Peck.*

Flocci erect, opaque, septate; spores terminal, nearly straight, multiseptate, colored, mostly subfusiform or lanceolate, about .003′ long, the terminal cell hyaline.

Cut surface of wood. Savannah. October.

Streptothrix abietina, *Peck.*

Tufts pulvinate, scattered or crowded, blackish-brown; flocci branched, pale, echinulate; spores globose, minutely rough, .00025′–.0003′ in diameter.

Bark of prostrate trunks of spruce trees. Sandlake. September.

The larger rough spores and echinulate threads separate this species from *S. atra.*

Aspergillus fuliginosus, *Peck.*

Creeping flocci white, septate; fertile flocci erect, not septate, crowned with a globose head which is rough with projecting processes; spores globose, sooty-black, smooth, .00016′ in diameter.

Rice paste and apple. Albany.

ASCOMYCETES.

Microsphaera Russellii, *Clinton.*

Amphigenous; mycelium arachnoid, evanescent; appendages 8–18, very long, flexuous, colored, paler toward the tips which are simple or one to three times divided; sporangia ovate, 4–8; spores 4, elliptical, .0007′–.0008′ long.

Leaves and petioles of *Oxalis stricta.* Buffalo, *Clinton.* Poughkeepsie, *Gerard.* North Greenbush. October.

This might with almost equal propriety be referred to the genus Erysiphe.

Erysiphe Euphorbiae, *Peck.*

Mycelium thin; conceptacles small, .0035′ in diameter; appendages few, long, flexuous, colored; sporangia broadly ovate, 3–4; spores 3–4, large, .001′ × .00065′.

Leaves of *Euphorbia hypericifolia.* Greenbush. October.

Geoglossum simile, *Peck.*

Plant 1′–2′ high, black, minutely hairy; club obtuse, generally compressed, sometimes with a broad shallow groove on one side, tapering into the stem; asci broad; spores fasciculate, elongate, slightly curved, seven-septate, colored, .003′–.0004′ long; paraphyses slightly thickened at the tips, septate, sometimes branched.

Damp mossy ground in swamps and in peat bogs. Ft. Edward, *Howe.* Sandlake. September.

It is scarcely possible to separate this species from *G. hirsutum* without microscopical examination.

Vibrissea lutea, *Peck.*

Plant 6″–12″ high, yellow, receptacle subglobose, smooth, the margin slightly lobed, inflexed, free; stem nearly equal, solid, a little more highly colored than the receptacle, longitudinally wrinkled when dry; asci clavate or cylindrical; spores long, filiform.

Prostrate mossy trunks of trees and among fallen leaves in woods. North Elba. August.

Peziza Solenia, *Peck.*

Cups minute, nearly cylindrical, hairy, brown, opening by a contracted, white-margined mouth; spores oblong, crowded or biseriate, uniseptate usually with four nuclei, subhyaline, .0005′ long; paraphyses filiform.

Dead stems of *Eupatorium ageratoides* in damp shaded places. Watkins Glen. September.

The cups are a little longer than broad, and appear like some minute solenia.

Rhytisma linearis, *Peck.*

Linear, here and there interrupted or constricted, black ; asci broad, clavate, eight-spored ; spores very long, obtuse, strongly narrowed in the middle, involved in mucus, .002′–.003′ long.

Under surface of leaves of pine trees, *Pinus Strobus.* Guilderland, Greenbush and Sandlake. June.

It forms a thick black line on the under surface of the leaf, often extending the entire length. The spores appear to consist of two oblong parts connected by a narrow neck.

Hypomyces polyporinus, *Peck.*

Perithecia minute, ovate or subconical, seated on a pallid subiculum, smooth, yellowish, or pale amber ; asci narrow, linear ; spores fusiform, acuminate at each end, nucleate, .0006′–.0007′ long.

On *Polyporus versicolor.* Worcester and Croghan. July and September.

Nectria Apocyni, *Peck.*

Conidia. Subhemispherical or irregular, small, pale red ; spores fusiform, straight, .0005′–.0006′ long.

Ascophore. Caespitose or scattered, dull red , perithecia minute, pale ochraceous, and subglobose when moist, dull red collapsed or laterally compressed and rough with minute whitish scales when dry ; spores biseriate, uniseptate, fusiform, nucleate, .00065′–.0008′ long.

Base of dead stems of *Apocynum cannabinum.* North Greenbush. October.

Nectria mycetophila, *Peck.*

Perithecia crowded or scattered, minute, smooth, subglobose, pale yellow when young, then pinkish-ochre ; ostiole minute, papillate, distinct, darker colored ; asci subclavate ; spores oblong, simple, .0005′ × .00016′.

Decaying fungi. New Scotland. October.

Sphaeria Staphylina, *Peck.*

Perithecia minute, black, covered by the epidermis, which at length ruptures in a stellate manner or irregularly; spores biseriate, colorless, constricted in the middle, three to five septate, .0009′–.001′ long, the two parts formed by the central septum unequal in diameter.

Dead twigs of *Staphylea trifolia.* Helderberg Mountains. May.

Sphaeria Desmodii, *Peck.*

Perithecia scattered or seriately placed, minute, covered by the epidermis, which is pierced by the acute ostiole, black; asci clavate; spores biseriate, fusiform, colorless, four nucleate, .00035′–.0004′ long.

Dead stems of Desmodium. Garrisons. June.

VI. Contributions to a Knowledge of North American Moths

BY AUG. R. GROTE.

[*Read before this Society, June 6th*, 1873.]

DUMERIL, in 1823, and afterwards Boisduval, in 1836, availed themselves of the structural feature offered by the different antennal forms in the Lepidoptera to establish ideal divisions, higher than Families, in the sub-order. Although not so strongly insisted upon, other considerations may have suggested themselves, apparently justifying a separation of the Butterflies from the rest of the Lepidoptera. But, as we become acquainted with the sub-order, the peculiarities of the Butterflies lessen by comparison. And since the form of the antennae is nowhere absolute, and even in reality will not always separate the Butterflies from many Moths, and since the divisions proposed by Dr. Boisduval are evidently of unequal value, and the character on which they rest of little systematic weight, the terms cannot be retained. Boisduval's terms are in part synchronous with Duméril's, which, in case of acceptance of the values intended, should be preferred. The comparatively persistent character of the clavate antennae in the Butterflies is noticed by Hübner in 1816. But it is evident that the Hesperidae, for instance, present a modification of the form of the antennus as we find it in the higher Butterflies, and are accordingly not to be indifferently classed with them. It would seem as though the succession of Family groups in the Lepidoptera is not to be disturbed by higher exact division, nor need we employ other terms than our common ones for general purposes of designation.

Professor Agassiz, in 1849, records a character which had been before unnoticed by the classificators of the sub-order. Agassiz calls attention to the fact, that there is a common position of the

ERRATA ET ADDENDA.

Page 6, line 4, for "Plate 2" read "Plate 1."
" 20, after line 13 insert "Massachusets; New York; Pennsylvania."
" 21, " " 6 insert "Type: Dupo jussieuae, *Hübner*."
" 21, " " 22 insert "*Philampelus Linnei*, G. & R."
" 27, to line 13 add "—"
" 27, " 15 add "—"
" 29, line 24, for "this" read "the."
" 46, last line, for "1′ thick" read "1″ thick."
" 47, line 4, for "Heydnum" read "Hydnum."
" 47, " 9, for "hygroyhanous" read "hygrophanus."
" 50, " 31, for "2′–4′ thick" read "2″–4″ thick."
" 56, " 20, for "Heygrocybe" read "Hygrocybe."
" 56, " 34, for "Caraghan" read "Croghan."
" 65, " 18, for "enchinulate" read "echinulate."
" 70, " 20, for ".004′" read ".04′."
" 90, " 4, (foot note) for "unhüllt" read "umhüllt."
" 90, " 5, (do.) for "Penthinen–artigen" read "Penthinenartiger."
" 90, " 6, (do.) for "einen" read "einem."
" 100, " 2, for "Publicatoins" read "Publications."
" 103, after line 6 insert: **Mamestra subjuncta,** *Grote.*
Hadena subjuncta, G. & R.
Habitat, Atlantic District.
" 107, line 30, for "remind" read "reminds."
" 110, " 10, dele "*subjuncta*."
" 112, " 11, for "evanida" read "evanidum."
" 112, " 22, for "Ommatospila" read "Ommatostola."
" 116, " 4, for "else all the tibiae without spines," read "else the tibiae without spines; middle and hind tibiae spinose."
" 145, " 1, (foot note) for "Hand" read "Hande."

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